Please replace the SUMMARY OF THE INVENTION at page 2 with the following rewritten paragraph:

-- A GPS receiver is mounted on a conventional research plot planter to provide data on the plot start location. When the planter trip signal is received by the controller computer, which is also mounted on the conventional research plot planter it requests the longitude and latitude from the GPS receiver for the individual seed planted in a given row. This data is stored with the plot identifier. Each time a new plot starts, the data is recorded so that the entire grid is mapped out in start locations. During note taking or harvest, a GPS receiver is used to provide current longitude and latitude that the computer will look up in the data file and correlate to a particular plot identifier. Once the computer has matched the proper plot identifier, the note or harvest data can then be recorded with the proper plot identifier. --

Please replace the BRIEF DESCRIPTION OF THE DRAWINGS at page 2 with the following rewritten paragraph:

-- Fig. 1 is a perspective view of a research field for row crops;

Fig. 2 is an enlarged scale perspective view of the area outlined by lines 2-2 in Fig. 1;

Fig. 3 is an enlarged scale perspective view of a planter used to plant the field in Figure 1;

Fig. 4 is a schematic diagram showing the implementation of the method of this invention, and

Fig. 5 is a logic chart for all the software used in conjunction with this invention. --

Please replace paragraphs 3 and 4 on pages 3 and 4 under the heading DESCRIPTION OF THE PREFERRED EMBODIMENT with the following rewritten paragraphs:

-- When the field 10 is planted, a conventional farm tractor 24 and a research planter 26 are used. Separate packets of seed are typically planted in each row 17 in each plot 16. The planter 26 of this invention includes a computer 28 which is operatively connected by conventional means to a GPS receiver 30 so that as each seed is deposited in the soil of a row, a global position of the planted seed is instantaneously determined. Research planters with GPS receivers connected to a computer are not heretofore known to be used in research plots or anywhere else. This data is entered in the memory of computer 28 along with the range number of the plot, the number of the plot, the number of the row of the plot, and the number ("A", "B", "C",. . . "F" - Fig. 4) of the seed in the row, all with an identification of the seed that was planted at the identified location.

The research planter 26 of this invention can have a sensor (not shown), e.g., a photocell, to monitor the dropping of each seed whereupon a signal is transmitted to the computer 28 or GPS 30 to trigger a location reading to be stored in the memory of the computer. More specifically, when the first plot is manually tripped, the computer 30 uses vector information and determines the next tripping location. The computer 30 has a program that allows entry of data as to the row length and alley width so that the system could calculate the next plot location from the original planter trip. An additional parameter is entered into the program to include the number of trips needed to make a pass across the field and the number of passes that would be needed to complete the planting grid. This system maintains accuracy to around 2 inches. A copy of the logic chart for these functional steps is shown in Fig. 5. Systems other than GPS could be used to attain this information. Examples would be radio, sonar or laser. Longitude and latitude on earth are not fully needed for

this function. Displacement or distance from the original location is what will drive the tripping.--